

## PATENT COOPERATION TREATY

PCT

## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner  
 US Department of Commerce  
 United States Patent and Trademark  
 Office, PCT  
 2011 South Clark Place Room  
 CP2/5C24  
 Arlington, VA 22202  
 ETATS-UNIS D'AMERIQUE  
 in its capacity as elected Office

Date of mailing (day/month/year) 25 April 2001 (25.04.01)	
International application No. PCT/US00/19134	Applicant's or agent's file reference RCA89648
International filing date (day/month/year) 13 July 2000 (13.07.00)	Priority date (day/month/year) 16 July 1999 (16.07.99)
Applicant BOUILLET, Aaron, Reel et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:

14 February 2001 (14.02.01)

☐ in a notice effecting later election filed with the International Bureau on:


2. The election ☒ was  
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland  Facsimile No.: (41-22) 740.14.35	Authorized officer  S. Mafla  Telephone No.: (41-22) 338.83.38
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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference RCA89648		<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US00/19134	International filing date (day/month/year) 13/07/2000	Priority date (day/month/year) 16/07/1999	
International Patent Classification (IPC) or national classification and IPC H04N5/455			
Applicant THOMSON LICENSING S.A. et al.			
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of sheets.</p>			
<p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> <li>I <input checked="" type="checkbox"/> Basis of the report</li> <li>II <input type="checkbox"/> Priority</li> <li>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</li> <li>IV <input type="checkbox"/> Lack of unity of invention</li> <li>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</li> <li>VI <input type="checkbox"/> Certain documents cited</li> <li>VII <input checked="" type="checkbox"/> Certain defects in the international application</li> <li>VIII <input checked="" type="checkbox"/> Certain observations on the international application</li> </ul>			
Date of submission of the demand 14/02/2001		Date of completion of this report 19.10.2001	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized officer Schneiderlin, J Telephone No. +49 89 2399 7400	



**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/US00/19134

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):  
**Description, pages:**

1-8 as originally filed

**Claims, No.:**

1-17 as originally filed

**Drawings, sheets:**

1/4-4/4 as received on 17/08/2000

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).  
☐ the language of publication of the international application (under Rule 48.3(b)).  
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority in written form.  
☐ furnished subsequently to this Authority in computer readable form.  
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:  
☐ the claims, Nos.:

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/US00/19134

☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Yes:	Claims	2-5,8,12,12,13,15,16
	No:	Claims	1,6,7,9,10,11,14,17
Inventive step (IS)	Yes:	Claims	
	No:	Claims	1-17
Industrial applicability (IA)	Yes:	Claims	1-17
	No:	Claims	

2. Citations and explanations  
**see separate sheet**

**VII. Certain defects in the international application**

The following defects in the form or contents of the international application have been noted:  
**see separate sheet**

**VIII. Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:  
**see separate sheet**

**Re Item V**

1. The following document is referred to in this communication; the numbering will be adhered to in the rest of the procedure: D1 WO 95 27371
2. D1 discloses a system and a method (see abstract) for performing carrier acquisition of a television signal having a pilot tone centered about a carrier frequency (see page 3 ll. 10-11). The system comprises (see fig. 1 and 2 and page 4):
  - a tuner circuit 10 18 20 for amplifying the television signal level including:
    - a first RF amplifier 10
    - a second IF amplifier 30
  - a carrier recovery circuit 40-58 for acquiring the carrier frequency from the amplified television signal (see last paragraph of page 5)
  - a control circuit 24 12, coupled to the tuner and to the carrier recovery circuit (via the ADC 22), for generating gain up and down signals (in fig. 2 signal from fig. 3) and including an AGC controller 31 74
  - a capacitor 33 which stores the target gain for the amplifier (see paragraph bridging pages 4 and 5): the voltage across the capacitor corresponds to the control signal of claim 1.

Therefore, the subject matter of the apparatus claims 10, 11, 14 and 17 is not new.

The closely related method claims 1, 6, 7 and 9 also lack novelty.

Furthermore, it should be noted that even if novelty of those claims could be argued, based on minor differences (for example that the "first amplification level is greater than the second amplification level") between the features of those claims and those disclosed in D1, the subject-matter of those claims would not involve an inventive step, in view of the disclosure of D1, especially as this document discloses the same object and the same type of solution as claimed.

3. In D1 (see page 11 last paragraph) during a first non coherent AGC mode the AGC system is operated at maximum gain which magnifies the DC pilot and aids in the acquisition of frequency lock. The gain is then decreased and during coherent (normal) operation of the AGC (after sync lock has been attained) the IF gain is reduced to the nominal value and so is the DC pilot (see fig. 5). Claims 2, 5, 12 and 13 describe a similar way of operating the two amplifiers and this cannot be considered as involving an inventive step.

4. The subject matter of the other dependent claims is also not inventive because:
- detecting the pilot tone (claim 4) and generating a carrier lock signal (claim 8) are generally known in the art of demodulating VSB and
  - the system of D1 includes
    - an input keyboard 14 (claim 3).
    - a gain up signal upon receipt of which the gain of the tuner circuit is increased (claim 15).
    - a gain down signal upon receipt of which the gain of the tuner circuit is decreased (claim 16).

**Re Item VII**

1. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the document D1 is not mentioned in the description, nor is this document identified therein.
2. A document reflecting the prior art described on page 1 is not identified in the description (Rule 5.1(a)(ii) PCT).
3. The description is not in conformity with the claims as required by Rule 5.1(a)(iii) PCT.
4. Independent claims 1 and 10 are not in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with those features known in combination from the prior art (document D1) being placed in the preamble (Rule 6.3(b)(i) PCT) and with the remaining features being included in the characterising part (Rule 6.3(b)(ii) PCT).  
If, however, the applicant is of the opinion that the two-part form would be inappropriate, then reasons therefor should be provided in the letter of reply. In addition, the applicant should ensure that it is clear from the description which features of the subject-matter of the claims are already known in combination from the document D1 (see the PCT Guidelines, III-2.3a).
5. The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

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International application No. PCT/US00/19134

**Re Item VIII**

1. There seem to be inconsistency between the description and claims 5 and 13 which are about decreasing the gain of the second amplifier whereas the description describes only modifying the gain of the IF module.

2. The following expressions have no antecedent:

- "said first control" and "said second control signal" in claim 10.
- "said reference value" in claims 2, 5 and 12-13.
- "said control signal" in claims 11 and 12.

3. In claims 2 and 5 "amplification level occurs" in response to something, this is inconsistent with the description which describes only modifying the gain of an amplifier.

# PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>RCA89648</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. <b>PCT/US 00/19134</b>	International filing date (day/month/year) <b>13/07/2000</b>	(Earliest) Priority Date (day/month/year) <b>16/07/1999</b>
Applicant <b>THOMSON LICENSING S.A. et al.</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 2 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.



the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :



contained in the international application in written form.



filed together with the international application in computer readable form.



furnished subsequently to this Authority in written form.



furnished subsequently to this Authority in computer readable form.



the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.



the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of Invention is lacking** (see Box II).

**4. With regard to the title,**



the text is approved as submitted by the applicant.



the text has been established by this Authority to read as follows:

**5. With regard to the abstract,**



the text is approved as submitted by the applicant.



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

**6. The figure of the drawings to be published with the abstract is Figure No.**



as suggested by the applicant.



because the applicant failed to suggest a figure.



because this figure better characterizes the invention.

4



None of the figures.



## INTERNATIONAL SEARCH REPORT

International Application No

P 00/19134

**A. CLASSIFICATION OF SUBJECT MATTER**  
 IPC 7 H04N5/455

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 546 138 A (KRISHNAMURTHY ET AL.) 13 August 1996 (1996-08-13)	1-4, 6, 7, 9-12, 14-17
A	abstract; claim 7 column 1, line 26 -column 2, line 67 column 4, line 11 -column 6, line 22 ---	5, 8, 13
X	WO 95 27371 A (ZENITH ELECTRONICS) 12 October 1995 (1995-10-12)	1-4, 6, 7, 9-12, 14-17
A	abstract page 1, line 1 - last line page 3, line 9 - line 23 page 5, line 12 -page 8, line 11 page 11, line 15 -page 12, line 9 -----	5, 8, 13

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

## \* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

3 October 2000

Date of mailing of the international search report

10/10/2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
 NL - 2280 HV Rijswijk  
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
 Fax: (+31-70) 340-3016

Authorized officer

Berwitz, P

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

P/S 00/19134

Patent document - cited in search report		Publication date	Patent family member(s)	Publication date
US 5546138	A	13-08-1996	NONE	
WO 9527371	A	12-10-1995	US 5627604 A	06-05-1997
			CA 2186339 A	12-10-1995
			CN 1145151 A	12-03-1997
			JP 9511629 T	18-11-1997

## PATENT COOPERATION TREATY

From the **EXPRESS EL902 321 36 US**  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

TRIPOLI, Joseph S.  
THOMSON MULTIMEDIA LICENSING INC.  
P.O. Box 5312  
2 Independence Way  
Princeton, New Jersey 08540  
ETATS-UNIS D'AMERIQUE

KA/KA

NOV - 6 2001

PCT

NOTIFICATION OF TRANSMITTAL OF  
THE INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT

(PCT Rule 71.1)

Date of mailing  
(day/month/year)

19.10.2001

Applicant's or agent's file reference  
RCA89648

## IMPORTANT NOTIFICATION

International application No.  
PCT/US00/19134

International filing date (day/month/year)  
13/07/2000

Priority date (day/month/year)  
16/07/1999

Applicant

THOMSON LICENSING S.A. et al.

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

## 4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

Event	8A Final Country Selection to Davida
Deadline	16 Nov 2001
Entered	DPF 11/7/01

Name and mailing address of the IPEA/



European Patent Office  
D-80298 Munich  
Tel. +49 89 2399 - 0 Tx: 523656 epmu d  
Fax: +49 89 2399 - 4465

Authorized officer

Schalinatus, D


Tel.+49 89 2399-8242



## PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>RCA89648</b>		<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. <b>PCT/US00/19134</b>	International filing date (day/month/year) <b>13/07/2000</b>	Priority date (day/month/year) <b>16/07/1999</b>	
International Patent Classification (IPC) or national classification and IPC <b>H04N5/455</b>			
Applicant <b>THOMSON LICENSING S.A. et al.</b>			
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 6 sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of sheets.</p>			
<p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> <li>I <input checked="" type="checkbox"/> Basis of the report</li> <li>II <input type="checkbox"/> Priority</li> <li>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</li> <li>IV <input type="checkbox"/> Lack of unity of invention</li> <li>V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</li> <li>VI <input type="checkbox"/> Certain documents cited</li> <li>VII <input checked="" type="checkbox"/> Certain defects in the international application</li> <li>VIII <input checked="" type="checkbox"/> Certain observations on the international application</li> </ul>			
Date of submission of the demand  <b>14/02/2001</b>		Date of completion of this report  <b>19.10.2001</b>	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized officer  <b>Schneiderlin, J</b>  Telephone No. +49 89 2399 7400	



**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/US00/19134

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, pages:**

1-8 as originally filed

**Claims, No.:**

1-17 as originally filed

**Drawings, sheets:**

1/4-4/4 as received on 17/08/2000

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/US00/19134

☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Yes:	Claims	2-5,8,12,12,13,15,16
	No:	Claims	1,6,7,9,10,11,14,17
Inventive step (IS)	Yes:	Claims	
	No:	Claims	1-17
Industrial applicability (IA)	Yes:	Claims	1-17
	No:	Claims	

- 2. Citations and explanations  
see separate sheet**

**VII. Certain defects in the international application**

The following defects in the form or contents of the international application have been noted:  
**see separate sheet**

**VIII. Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:  
**see separate sheet**

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/US00/19134

**Re Item V**

10/031020  
531 Rec'd PCT/PT 14 JAN 2002

1. The following document is referred to in this communication; the numbering will be adhered to in the rest of the procedure: D1 WO 95 27371
2. D1 discloses a system and a method (see abstract) for performing carrier acquisition of a television signal having a pilot tone centered about a carrier frequency (see page 3 II. 10-11). The system comprises (see fig. 1 and 2 and page 4):
  - a tuner circuit 10 18 20 for amplifying the television signal level including:
    - a first RF amplifier 10
    - a second IF amplifier 30
  - a carrier recovery circuit 40-58 for acquiring the carrier frequency from the amplified television signal (see last paragraph of page 5)
  - a control circuit 24 12, coupled to the tuner and to the carrier recovery circuit (via the ADC 22), for generating gain up and down signals (in fig. 2 signal from fig. 3) and including an AGC controller 31 74
  - a capacitor 33 which stores the target gain for the amplifier (see paragraph bridging pages 4 and 5): the voltage across the capacitor corresponds to the control signal of claim 1.

Therefore, the subject matter of the apparatus claims 10, 11, 14 and 17 is not new. The closely related method claims 1, 6, 7 and 9 also lack novelty. Furthermore, it should be noted that even if novelty of those claims could be argued, based on minor differences (for example that the "first amplification level is greater than the second amplification level") between the features of those claims and those disclosed in D1, the subject-matter of those claims would not involve an inventive step, in view of the disclosure of D1, especially as this document discloses the same object and the same type of solution as claimed.

3. In D1 (see page 11 last paragraph) during a first non coherent AGC mode the AGC system is operated at maximum gain which magnifies the DC pilot and aids in the acquisition of frequency lock. The gain is then decreased and during coherent (normal) operation of the AGC (after sync lock has been attained) the IF gain is reduced to the nominal value and so is the DC pilot (see fig. 5). Claims 2, 5, 12 and 13 describe a similar way of operating the two amplifiers and this cannot be considered as involving an inventive step.

4. The subject matter of the other dependent claims is also not inventive because:
- detecting the pilot tone (claim 4) and generating a carrier lock signal (claim 8) are generally known in the art of demodulating VSB and
  - the system of D1 includes
    - an input keyboard 14 (claim 3).
    - a gain up signal upon receipt of which the gain of the tuner circuit is increased (claim 15).
    - a gain down signal upon receipt of which the gain of the tuner circuit is decreased (claim 16).

**Re Item VII**

1. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the document D1 is not mentioned in the description, nor is this document identified therein.
2. A document reflecting the prior art described on page 1 is not identified in the description (Rule 5.1(a)(ii) PCT).
3. The description is not in conformity with the claims as required by Rule 5.1(a)(iii) PCT.
4. Independent claims 1 and 10 are not in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with those features known in combination from the prior art (document D1) being placed in the preamble (Rule 6.3(b)(i) PCT) and with the remaining features being included in the characterising part (Rule 6.3(b)(ii) PCT).  
If, however, the applicant is of the opinion that the two-part form would be inappropriate, then reasons therefor should be provided in the letter of reply. In addition, the applicant should ensure that it is clear from the description which features of the subject-matter of the claims are already known in combination from the document D1 (see the PCT Guidelines, III-2.3a).
5. The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).



**Re Item VIII**

1. There seem to be inconsistency between the description and claims 5 and 13 which are about decreasing the gain of the second amplifier whereas the description describes only modifying the gain of the IF module.

2. The following expressions have no antecedent:

- "said first control" and "said second control signal" in claim 10.
- "said reference value" in claims 2, 5 and 12-13.
- "said control signal" in claims 11 and 12.

3. In claims 2 and 5 "amplification level occurs" in response to something, this is inconsistent with the description which describes only modifying the gain of an amplifier.